PP082. Table 1.

** = time between last observation and eclampsia				Complaints = headache, scotoma,
	total	proteinuria	hypertension	epigastric pain, vomitting, oedeme
observations made by specialist	13	NotReported present absent	NotReported present absent	present absent
< 7days ** except 1made by GP	9	6 2 1	2 4 3	5 4
7days or >** except 1 by midwife	4	2 1 1	1 0 3	0 4

Objectives: To describe eclampsia in Flanders and compare the results with data of United Kingdom Obstetric Surveillance System (UKOSS) and a similar study in the Netherlands. Methods Between January and December 2012 each maternity hospital in Flanders was contacted monthly to learn whether a case of eclampsia had occurred. For each reported case an extensive questionnaire was completed. The obtained data were analyzed using the IBM-SPSSvs20 and BMJ-CIA programs.

Results: Over 95% of all maternity hospitals in Flanders participated. In 2012, 16 eclampsia cases were reported (incidence 2.3/10,000). Data of 14/16 cases could be used for analysis. No maternal or perinatal death occurred. In 71.4% (10/14;95%CI:45.4–88.3%) the gestational age at time of delivery was <37 weeks; in 28.6% (4/14;95%CI:11.7–54.6%) the insult occurred after the delivery; 50.00% (7/14;95%CI:26.8–73.2%) of the patients was primigravida and 28.6% (4/14;95%CI:11.7–54.6%) was negroid. Data presented in the table below summarize the findings of the last medical examination preceding the insult ($n = 13$, insufficient data in 1 case).

Conclusions: The incidence of eclampsia in Flanders is comparable to that of the UK (2.7/10,000) and is 2.7 times smaller than that of the Netherlands (6.2/10.000). Proteinuria was not tested in 9. In 5 of 14 no clear alert sign was seen at the last observation compared to 10.8% and 21% in Ndl and UK.

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PP083. Maternal pre-eclampsia and bone mineral density of the adult offspring

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Introduction: Preterm birth at very low birth weight (VLBW; <1500 g) is associated with cardiometabolic risk factors and reduced bone mineral density (BMD) in the adult offspring. Pre-eclampsia (PE) is a frequent cause of preterm birth and is also associated with cardiometabolic risk factors in the offspring. Whether it is associated with BMD is not known.

Objective: To study BMD in adult offspring of mothers with pre-eclampsia.

Methods: We studied participants of the Helsinki Study of Very Low Birth Weight Adults: 144 born at VLBW and 139 born at term. From the VLBW and term offspring a respective 32 and 11 were born from pregnancy complicated by preeclampsia. We measured BMD at age 18–27 years by dual X-ray absorptiometry. We express BMD in Z scores which indicate the difference in SD units from the value expected for sex and age.

Results: VLBW adults exposed to maternal pre-eclampsia had higher lumbar spine Z score (mean −0.44 SD units, compared to −1.07 in unexposed VLBW adults, $p = 0.002$) and femoral neck Z score (−0.05 vs. −0.53, $p = 0.003$). Corresponding Z scores for those born at term were −0.02 (PE) and −0.45 (no PE) for lumbar spine ($p = 0.2$), 0.78 and 0.08 for femoral neck ($p = 0.02$). The Table shows mean differences after adjustment for offspring current body size and potential confounders.

Conclusions: Young adults exposed to maternal PE have higher BMD than those not exposed. This suggests that pre-eclampsia has a long-term protective effect on offspring bone health.

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PP084. Hypertension after preeclampsia in women with C1114G polymorphism in rgs2 (the regulator of g protein signaling 2)

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Introduction: Women with preeclampsia have increased risk of developing hypertension later in life. We recently demonstrated an association between preeclampsia and the CG or GG genotype of the rs4606 in the regulator of G protein signaling 2 (RGS2) gene. RGS2 negatively regulates several vasoconstrictors.

Objectives: To explore the potential association between the rs4606 and hypertension after pregnancy in women with previous preeclampsia or controls.

Methods: DNA from 933 women with a history of preeclampsia and 2010 women without a history of preeclampsia was analyzed for the rs4606 in RGS2.

Results: Preeclampsia, but not the rs4606, was significantly associated with hypertension (systolic blood pressure $\geqslant$140 mmHg and/or diastolic blood pressure $\geqslant$90mmHg and/or taking antihypertensive drugs) in both univariate and multivariate analyses, including adjustment for classical cardiovascular risk factors. For women with hypertension defined as blood pressure above 160/100 mmHg and/or

taking antihypertensive drugs, the rs4606 was significantly associated with hypertension in multivariate analysis. Our data further suggested an association between the rs4606 and physical activity in relation to hypertension.

Conclusions: Women with the rs4606 CG or GG genotype may be at elevated risk for severe hypertension. However, a history of preeclampsia remained an independent predictor of hypertension after accounting for this polymorphism and classical cardiovascular risk factors

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PP085. Hypertensive complication in pregnancy – HELLP syndrome – One year study (2012)

Mariana Miranda, Bruna Ambrosio, Rui Gomes, Isabel Santos, Teresa Matos, Antonia Nazare

Introduction: HELLP syndrome is characterized by hemolysis with a microangiopathic blood smear, elevated liver enzymes, and low platelet count. It develops in 10–20% of women with severe preeclampsia/eclampsia. The syndrome is associated with maternal morbidities – DIC, renal failure, pulmonary edema and hepatic hematoma/rupture. Some need transfusions and others require laparotomies for intra-abdominal bleeding.

Objectives: Study the incidence and related risk factors of HELLP syndrome in Pregnancy, as well as the maternal/fetal outcome.

Methods: A retrospective study of admissions for HELLP syndrome in 2012.The statistical analysis was based on Excel 2007.

Results: In 55 admissions for hypertensive complications in pregnancy, 3 women had HELLP syndrome – 2 were black race and 1 was caucasian. The average maternal age was 29. None had relevant medical history. 2 of the women developed HELLP syndrome after severe preeclampsia. The fetal/neonatal outcomes were prematurity in 2 cases, birth weight average was 1798g and none had apgar-index below 7. There was no fetal death. Premature delivery occurred in 2 cases and all were by cesarean. Maternal complications that determined Intensive Care Unit Admission was recorded in one case – laparotomy for internal bleeding and transfusions were needed. No maternal death occured.

Conclusions: HELLP syndrome is associated with many morbidities which risk increases with severity of symptoms/lab results. We had no aggresive/fatal outcomes.

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PP086. Severe hypertensive complications in pregnancy – Two years study (2011–2012)

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Introduction: There are major hypertensive disorders related to pregnancy-preeclampsia, eclampsia and HELLP syndrome. These women are at an increased risk for placental abruption, renal failure, cerebral hemorrhage, hepatic failure/rupture, pulmonary edema, DIC and of long-term cardiovascular disease.

Objectives: Study the incidence, risk factors, maternal/fetal outcome of hypertensive complications that determined Intensive Care Unit admission.

Methods: A retrospective study of admissions in Intensive Care Unit for preeclampsia, HELLP syndrome and eclampsia in 2011–2012.

Results: There were 8 admissions in Intensive Care – 88% black women, average age was 20 years and all were nulliparous. 1 had an hypertension induced by pregnancy, but 63% had increased blood pressure in hospital admission. 50% had elevated liver enzymes, 25% proteinuria, 1 low platelet count and 1 had normal blood results. 50% of the admissions were due to eclampsia, 38% due to severe preeclampsia and 1 due to HELLP. Fetal/neonatal outcomes were prematurity in 25%, birth weight average was 2759 g and none had apgar below 7. There was no fetal death. Vaginal delivery occurred in 25% and caesarian in 75%. Maternal complications were elevated blood pressure (75%), cardiorespiratory disorders (38%), encephalopathy (25%), renal disorder (13%) and convulsions (13%). There was no maternal death.

Conclusion: The risk of adverse outcome increases with the severity of hypertension and organ damage. Early detection and appropriate management are essential.

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PP087. Multicenter external validation and recalibration of a model for preconceptional prediction of recurrent early-onset preeclampsia

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Introduction: In an earlier paper we reported on the development of a model aimed at the prediction of preeclampsia recurrence, based on variables obtained before the next pregnancy (fasting glucose, BMI, previous birth of a small-for-gestational-age infant, duration of the previous pregnancy, and the presence of hypertension).

Objective: To externally validate and recalibrate the prediction model for the risk of recurrence of early-onset preeclampsia.

Methods: We collected data about course and outcome of the next ongoing pregnancy in 229 women with a history of early-onset preeclampsia. Recurrence was defined as preeclampsia requiring delivery before 34 weeks. We computed risk of recurrence and assessed model performance. In addition, we constructed a table comparing sensitivity, specificity, and predictive values for different suggested risk-thresholds.

Results: Early-onset preeclampsia recurred in 6.6% of women. The model systematically underestimated recurrence risk. The model's discriminative ability was modest, the area under the receiver operating characteristic curve